

IN THE CLAIMS:

1.-9. (Cancelled).

10. (Currently amended) ~~An energy generating~~ A fuel battery system according to claim [7] 22, wherein

said ~~heat engine is an~~ internal combustion reformer engine, ~~said internal combustion engine comprising~~ comprises a variable drive valve, and

~~a reaction composition control~~ means for controlling a compression ratio of said internal combustion reformer engine by changing opening-and-closing timings of said variable drive valve.

11. (Currently amended) ~~An energy generating~~ A fuel battery system according to claim [7] 22, wherein

said ~~heat~~ internal combustion reformer engine has a time period to generate mechanical power [,] and

~~said heat engine~~ comprises [a] means for supplying compressed air to said a fuel battery using said mechanical power.

12.-15. (Cancelled)

16. (Currently amended) ~~An energy generating~~ A fuel battery system according to claim [7] 22, further comprising ~~a heating~~ means for heating a raw material to be injected into said ~~heat~~ internal combustion reformer engine; and

~~a fuel selecting~~ means between said ~~heat~~ internal combustion reformer engine and said ~~a~~ fuel battery [,] for selecting reaction fuel to be supplied to said fuel battery and heating fuel to be supplied to said heating means, wherein

said heating means ~~using~~ uses said heating fuel as fuel of said heating means, ~~wherein said heating means~~ and controls an amount of the supplied heat in order to heat the injected raw material to a target temperature indicated by a temperature control means by changing a supply ratio of unreacted fuel components from said fuel battery and exhaust substances from said fuel selecting means.

17. (Currently amended) ~~An energy generating~~ A fuel battery system according to claim [7] 22, wherein

~~said heat engine is an internal combustion engine,~~

said ~~energy generating~~ fuel battery system ~~transferring a~~ being configured to transfer heat generated by said ~~a~~ fuel battery to said internal combustion reformer engine [,] or ~~a heat generated by said internal combustion engine~~ to said fuel battery,

said heating means being provided for heating the ~~raw~~ material fuel to be injected to said internal combustion reformer engine,

~~said energy generating system comprising a~~ temperature control means for said internal combustion engine and said fuel battery,

said temperature control means being provided for controlling amounts of heat of said transferred generated heat ~~transfer means~~ and said heating means and an amount of supplied fuel so that temperature in a reaction chamber of said

internal combustion engine just before ignition ~~may become~~ becomes a temperature above a self-ignition temperature of the raw material under an atmosphere in said reaction chamber , ~~said temperature control means controlling said amounts of heat of said heat transfer means and said heating means and said amount of supplied fuel so that~~ and temperature of fuel to be supplied to said ~~fuel battery may become~~ engine reformer becomes an operating temperature of said fuel battery.

18. (Currently amended) ~~An energy generating~~ A fuel battery system according to claim 17, wherein

said temperature control means comprises ~~an internal combustion engine control means for controlling said internal combustion~~ reformer engine , ~~said internal combustion engine control means receiving an~~ which is configured to receive intake raw material temperature information transmitted from said temperature control means , ~~said internal combustion engine control means controlling and to control~~ said amount of produced fuel to be supplied to said fuel battery using selected data comprising an equivalent ratio, a compression ratio, a compression history, a cooling water temperature, a lubricant oil temperature, a lubricant oil pressure, and an intake gas flow rate.

19. (Currently amended) A vehicle mounting the ~~energy generating~~ fuel battery system according to claim 7, ~~which comprises~~ 22, further comprising

a motor for converting an electric power obtained from said a fuel battery to [a] mechanical power, wherein

an output shaft of said motor and a mechanical power output shaft of said ~~heat~~ internal combustion reformer engine are operatively connected to a wheel shaft through a mechanical transmission element.

20. (Currently amended) A vehicle mounting the ~~energy generating~~ fuel battery system according to claim 7, ~~which comprises~~ 22, further comprising ~~an electricity storing~~ means for storing a direct current electric power obtained from said ~~a~~ fuel battery, wherein

a mechanical power output shaft of said ~~heat~~ internal combustion reformer engine is connected to an electric generator, and

an alternating current electric power obtained from said electric generator ~~being~~ is converted to said direct current electric power by an alternating current electric power converting means to be stored in said electricity storing means, and

said ~~vehicle~~ power generator comprising a motor for driving said vehicle using the electricity stored in said electricity storing means, wherein

an output shaft of said motor ~~being~~ is connected to a wheel shaft through a mechanical transmission element.

21. (Currently amended) A vehicle according to claim 19, which comprises

an energy control means which receives a command signal of a driver and selected vehicle operational parameters and an internal state of said fuel battery

as inputs, and controls a reaction composition control means ~~and~~ , said electric generator and said motor based on said inputs.

22. (New) A fuel battery system having a fuel battery stack requiring hydrogen on a fuel electrode, comprising an internal combustion reformer engine and a power generator operatively associated with the internal combustion reformer engine, wherein said internal combustion reformer engine is configured to take a hydrogen-containing compound as a fuel material during a first period to perform a reforming reaction for generating hydrogen and during a second period to obtain a mechanical driving force by complete combustion of said fuel material,

means for switching between said first period and said second period, and

piping operatively connecting a sweeping port of said internal combustion reformer engine and the fuel electrode of said fuel battery stack such that hydrogen generated during said first period is fed to said fuel electrode through said piping.